

value changing section for changing a pixel value of a current pixel in an image data. Kadono does not disclose, teach or suggest this feature.

The abstract of Kadono discloses a change pixel predictor 4, in a two-value pixel system that receives an input signal and detects the pixel at which a transition in pixel values occurs from one pixel value to the other pixel value. The abstract of Kadono further discloses the change pixel predictor reading out the reference image stored in the memory, predicting the location of the change pixel, that is, the pixel that transitions between the two-valued pixel values, within an input signal. Applicant respectfully submits that Kadono discloses, teaches and suggests operations for detecting and predicting transition pixels rather than changing the value of current pixels, as recited in claims 1, 9 and 10.

The function of Kadono's change pixel detector is further disclosed in the explanation of Figs. 2(a)-2(d) at column 35, lines 19-45, wherein the processing of an input signal, shown in Fig. 2(a), is carried out pixel by pixel. Again, the change pixel is defined as a pixel whose value changes from white to black or black to white on a scanning line. Similarly, Fig. 30, and the accompanying text at column 65, lines 25-47, discloses change pixel predictor 206, which predicts the change pixel which will be output by the first change pixel detector 204c. Applicant respectfully submits that the change in pixel value being detected is not as a result of an operation of the apparatus, but is solely a result of the changing input signal shown in Fig. 2(a). Thus the operational function of the change pixel predictor, disclosed by Kadono, does not anticipate the Applicant's pixel value changing section, in which the value of a current pixel is changed, as recited in claims 1, 9 and 10.

Independent claims 1, 9 and 10 further recite an error distribution section for distributing an error value produced in the pixel value changing section to neighbor pixels. As discussed at the Examiner interview, Kadono also fails to disclose this feature.

Applicant's specification discloses, at page 8 lines 15-24, an error distribution section which receives, for example, a pixel value error value between the current pixel value and the changed pixel value. Although the abstract of Kadono uses phraseology such as "difference value calculator subtracts the output of the change pixel predictor 4 from the output of the change pixel detector 2," a close analysis of the change pixel predictor and the change pixel detector indicates that it is not the actual value of the pixel that is being subtracted, but is rather the position of the pixels, to generate a relative physical distance between the two pixels.

Such analysis is facilitated by referring to Figs. 2(a)-2(f) and the accompanying text at line 25, column 35 to line 2, column 36. Specifically, at column 35, lines 43-45, the difference value calculator outputs  $D=1$  as the difference between the detected change pixel  $P1$  and the predicted change pixel  $P0$ , whereas, the difference value calculator outputs  $D=2$  when calculating the difference in regards to  $P0$  and  $P1$  of Fig. 2(d) and Fig. 2(e). Applicant respectfully submits that difference values,  $D=1$  and  $D=2$ , in the context of Figs. 2(a)–2(e) and the accompanying text, can only refer to a difference in pixel position and not the actual values of the pixels.

Furthermore, the entire change pixel processing is not being done on the current pixel, as recited in claims 1, 9 and 10. As disclosed in column 35 lines 29-30,  $P_c$  in Fig. 2(b) indicates the final pixel, that is, the current pixel, whereas the change pixel processing operates on the  $P0$  and  $P1$  pixels. Thus, unlike Applicant's device that operates on the current pixel, Kadono discloses an apparatus that predicts, detects and operates on change pixels.

Accordingly, for the reasons discussed above, Kadono does not disclose, teach or suggest each and every feature recited in claims 1, 9 and 10. Therefore, the rejection of

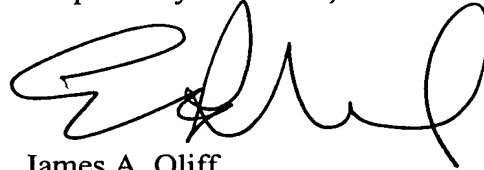
claims 1, 9 and 10 under 35 U.S.C. §102(b) is improper. Applicants respectfully submit, therefore, that independent claims 1, 9 and 10 are patentable over Kadono.

Claims 2-7 depend from independent claim 1 and are likewise patentable over Kadono at least for their dependence on an allowable base claim, as well as for additional features they recite. Withdrawal of the rejection over Kadono is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-10 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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